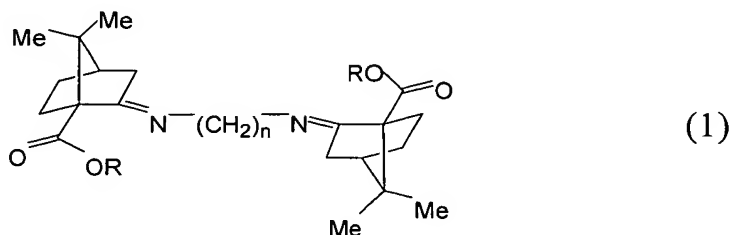


# ABSTRACT

Chiral chelating agents and chiral catalysts, which are formed from the chiral chelating agents and metal, are described. One chiral chelating agent has a general formula (1) as illustrated below:



wherein R represents H, methyl, ethyl, a primary, secondary or tertiary straight, branched or cyclic alkyl group having 3-7 carbon atoms, a heterocyclic or aromatic group, an aromatic group substituted at the 2-, 3- or 4-position, an aromatic-like group,  
5 or a naphthyl or naphthyl-derived group, and n is an integer between 0 and 4.